I Claim:

1. An economical, compact, frequency hopping, spread spectrum, wireless data telemetry transceiver, comprising:

a frequency hopping transmitter;

a frequency hopping receiver;

said receiver including a first bandpass filter tuned to a selected IF center frequency and having a first selected IF bandpass bandwidth, said first bandpass filter generating a first filtered IF signal; said first filtered IF signal including a frequency shift keying modulated waveform;

said receiver further including a frequency discriminator being configured to receive said first filtered IF signal and comprising a limiter amp stage and a quadrature detecting mixer having first and second inputs and an output;

said frequency discriminator receiving said first filtered IF signal frequency shift keying modulated waveform and generating a demodulated baseband video digital data signal in response thereto;

said frequency discriminator further comprising a second bandpass filter tuned to said selected IF center frequency and having a second selected IF bandpass bandwidth, said second bandpass filter being responsive to said first filtered IF signal and generating a second bandpass filter output signal in response thereto;

said limiter amp stage being configured to receive said second bandpass filter output signal and to generate a limiter amp output signal in response thereto;

said frequency discriminator further comprising a third bandpass filter tuned to a selected IF center frequency and having a third selected IF bandpass bandwidth, said third selected IF bandpass bandwidth being greater than said first selected IF bandpass bandwidth and said second selected IF bandpass bandwidth; said third bandpass filter being responsive to said limiter amp output signal and generating a quadrature filtered limiter amp output signal in response thereto;

said limiter amp output signal also being passed to said quadrature detecting mixer first input; said quadrature detecting mixer second input being configured to receive said quadrature filtered limiter amp output signal from said third bandpass filter, said first quadrature detecting mixer generating a demodulated baseband signal in response thereto.

2. The transceiver of claim 1, said frequency shift keying modulated waveform comprising a minimum shift keying waveform.

3. The transceiver of claim 1, said frequency discriminator further comprising an IF amp gain stage configured to receive said first filtered IF signal and generating an amplified first filtered IF signal therefrom.

4. The transceiver of claim 1, said first bandpass filter comprising a prefabricated, pretuned filter.

5. The transceiver of claim 4, said first bandpass filter comprising a prefabricated ceramic filter.

6. The transceiver of claim 1, said second bandpass filter comprising a prefabricated, pre-tuned filter.

7. The transceiver of claim 6, said second bandpass filter comprising a prefabricated ceramic filter .

8. The transceiver of claim 1, said third bandpass filter comprising a prefabricated, pre-tuned filter.

9. The transceiver of claim 8, said third bandpass filter comprising a prefabricated ceramic filter.

10. The transceiver of claim 8, said third bandpass filter comprising a prefabricated ceramic filter having a fixed bandwidth approximately double said first bandpass filter bandwidth.

11. The transceiver of claim 8, said second bandpass filter comprising a prefabricated ceramic filter having a fixed bandwidth substantially equal to said first bandpass filter bandwidth.

12. The transceiver of claim 1, said Limiting amp and said Mixer being integrated into a single integrated circuit.

13. The transceiver of claim 12, said single integrated circuit also including said IF amp gain stage configured to receive said first filtered IF signal.

14. An economical receiver demodulator for demodulating a frequency shift keying (FSK) signal and generating a demodulated baseband video digital data signal in response thereto, comprising;

a first bandpass filter tuned to a selected IF center frequency and having a first selected IF bandpass bandwidth, said first bandpass filter generating a first filtered IF signal;

a frequency discriminator configured to receive said first filtered IF signal and comprising a limiter amp stage and a quadrature detecting mixer having first and second inputs and an output;

said limiter amp stage being responsive to said first bandpass filter output signal and generating a limiter amp output signal in response thereto;

said frequency discriminator further comprising a second bandpass filter tuned to said selected IF center frequency and having a second selected IF bandpass bandwidth, said second selected IF bandpass bandwidth being greater than said first selected IF bandpass bandwidth; said second bandpass filter being responsive to said

limiter amp output signal and generating a quadrature filtered limiter amp output signal in response thereto;

said limiter amp output signal also being passed to said quadrature detecting mixer first input; said quadrature detecting mixer second input being configured to receive said quadrature filtered limiter amp output signal from said second bandpass filter, said first quadrature detecting mixer generating a demodulated baseband signal in response thereto.

15. The receiver demodulator of claim 14, said frequency shift keying modulated waveform comprising a minimum shift keying waveform.

16. The receiver demodulator of claim 14, said frequency discriminator quadrature filter further comprising an IF amp gain stage configured to receive said first filtered IF signal and generating an amplified first filtered IF signal therefrom.

17. The receiver demodulator of claim 14, said second bandpass filter comprising a prefabricated, pre-tuned filter.

18. The receiver demodulator of claim 17, said second bandpass filter comprising a prefabricated ceramic filter.

19. The receiver demodulator of claim 18, said second bandpass filter comprising a prefabricated ceramic filter having a fixed bandwidth approximately double said first bandpass filter bandwidth.

20. The receiver demodulator of claim 19, said Limiting amp and said Mixer being integrated into a single integrated circuit.

21. The receiver demodulator of claim 20, said single integrated circuit also including said IF amp gain stage configured to receive said first filtered IF signal.

22. An economical receiver demodulator for demodulating a frequency shift keying (FSK) IF signal at a selected IF center frequency and having a first selected IF bandpass bandwidth, and generating a demodulated baseband video digital data signal in response thereto, comprising;

a frequency discriminator configured to receive said IF signal and comprising a limiter amp stage and a quadrature detecting mixer having first and second inputs and an output;

said frequency discriminator further comprising a quadrature bandpass filter having a selected quadrature filter bandpass bandwidth greater than the IF bandpass bandwidth, said selected bandpass filter being responsive to said first filtered IF signal and generating a quadrature filtered output signal in response thereto;

said limiter amp stage being configured to receive said a IF signal and to generate a limiter amp output signal in response thereto;

said limiter amp output signal being passed to said quadrature detecting mixer first input; said quadrature detecting mixer second input being configured to receive said filtered limiter amp output signal from said third bandpass filter, said first quadrature detecting mixer generating a demodulated baseband signal in response thereto; and

said Limiting amp and said Mixer being integrated into a single integrated circuit.

23. The receiver demodulator of claim 22, said quadrature bandpass filter comprising a prefabricated fixed tuned filter.

24. The receiver demodulator of claim 22, said quadrature bandpass filter comprising a prefabricated ceramic filter having a fixed bandwidth approximately double the IF bandpass filter bandwidth.